



A Paradigm Shift of English Lecturers in Online Learning during COVID-19 Era

¹Margaret Stevani, ²Karisma Erikson Tarigan

¹Fakultas Pendidikan Bahasa Inggris, Universitas Pembinaan Masyarakat Indonesia,

²Fakultas Pendidikan Bahasa Inggris, Universitas Katolik Santo Thomas Sumatera Utara

*E-mail korespondensi: margaretstevani19@gmail.com

Diserahkan: 20 Mei 2022; Direvisi: 14 Juni 2022; Diterima: 16 Juni 2022

Abstrak

Kemampuan kritis dosen bahasa Inggris terhadap teknologi pendidikan 4.0 dapat mengubah peran dosen bahasa Inggris secara tradisional karena diperlukan keseimbangan antara soft skill dan kompetensi teknologi. Nilai transformasi digital telah menunjukkan bahwa intervensi pedagogis dengan pedagogi yang berpusat pada siswa dapat merancang tujuan dan strategi pendukung pembelajaran dan secara kritis mengevaluasi manajemen diri dosen bahasa Inggris sebagai para pelatih profesional. Penelitian ini bertujuan untuk mengkaji: (1) peran dan inovasi dosen bahasa Inggris dalam menghadapi pergeseran paradigma pembelajaran online, dan (2) kondisi pembelajaran digital terkait kompetensi dosen. Berfokus pada data kualitatif yang dikumpulkan dari 23 dosen bahasa Inggris di beberapa perguruan tinggi di Indonesia, hasil tanggapan para dosen bahasa Inggris menunjukkan bahwa keterampilan digital dosen meningkatkan faktor-faktor berikut, seperti pengetahuan, daya tanggap mahasiswa terhadap tugas, pengajaran dan pembelajaran yang kontekstual, dan merangsang gagasan sebagai umpan balik sehingga membantu universitas dalam mengenali nilai teknologi sebagai kebutuhan pengajaran mereka. Respon data dapat merefleksikan bagaimana dosen mentransformasi pembelajaran melalui konsep pedagogis yang inovatif dan penggunaan digital di dalam kelas. Penelitian selanjutnya dapat memperkuat profil pedagogis untuk pendidikan 4.0 dalam rangka menguasai teknologi dengan pandangan global budaya dunia.

Kata kunci: Pergeseran paradigma dosen bahasa inggris, pembelajaran online, teknologi pendidikan

Abstract

The critical ability of English lecturers to education technology 4.0 could change the role of the traditional English lecturer because there needed to be a balance between soft skills and technological competencies. The value of digital transformation had shown that pedagogical interventions with student-centered pedagogy could design learning support goals and strategies and critically evaluate English lecturers' self-management as professional trainers. The objectives of this study were to examine: (1) the role and innovation of English lecturers in the face of the paradigm shift in online learning, and (2) the conditions of digital learning related to lecturers' competencies. Focusing on qualitative data collected from 23 English lecturers at some higher education institutions in Indonesia, the results of English lecturer responses showed that the lecturers' digital skills enhanced the following factors, such as knowledge, the students' responsiveness to tasks, contextualized teaching and learning, and the stimulating of ideas as feedback thereby assisting the universities in recognizing the value of technology as their teaching needs. The data responses could reflect how the lecturers transformed learning through innovative pedagogical concepts and the use of digital in the classroom. Future research could strengthen the pedagogical profile for education 4.0 to master technology with a global view of world culture.

Keywords: Paradigm shift of english lecturers, online learning, education technology

How to Cite: Stevani, M., & Tarigan, K. E. (2022). A paradigm shift of english lecturers in online learning during covid-19 era. *Tarbiyah wa Ta'lim: Jurnal Penelitian Pendidikan dan Pembelajaran*, 9(2) 93-107. doi: <https://doi.org/10.21093/twt.v9i2.4487>



<https://doi.org/10.21093/twt.v9i2.4487>

Copyright© 2022, Stevani et al

This is an open-access article under the [CC-BY License](https://creativecommons.org/licenses/by/4.0/).



INTRODUCTION

Indonesian government policy efforts to prevent the community spread of COVID-19 are implementing social and physical distancing policies, and temporarily closing schools and universities (Fong et al., 2020; Prem et al., 2020; Regehr & Goel; 2020). This policy has been applied based on March 17, 2020 circular letter on the implementation of online learning and working from home to prevent the spread of COVID-19. Online learning in the narrow sense means that there is no direct classroom contact between lecturers and students (Mukhopadyay et al., 2020). The difference between online learning and face-to-face learning is that all major students can be educated without attending school. Therefore, online learning is an alternative solution for continuing learning during critical times, such as the recent global COVID-19 pandemic.

As software, technology plays an essential function in learning, mainly during the COVID-19 pandemic situation (Al-Hakim, 2021). In this policy, lecturers who teach at home during this pandemic by using information and communication technology (ICT) so that students can still observe the learning process at school. Evidence-based and observational school and university closures on the COVID-19 outbreaks through social interactions among students are considered (Basar & Sahin, 2020; Barclay et al., 2014). Lecturers' efforts and strategies for teaching during the pandemic with all means and limited infrastructure to support distance learning, including communicating with students who are responsible and ensuring students continue to learn at home, and choosing what form of communication media to send or receive student assignment (Guernsey et al., 2020). Moreover, some Indonesian universities no longer offer internet data subsidies to the students and faculty (Brown et al., 2020; Yuhariati et al., 2020; Jackson et al., 2020), so some lecturers also encourage students to use low-cost internet applications and free websites (Tuli et al., 2020).

The lecturers' digital literacy skills weakness to implement digital literacy is a major problem today (Putria et al., 2020). Digital literacy refers to an individual's interest in attitudes and abilities to use digital communication tools and technologies to access, manage, analyze, evaluate information, build and develop new knowledge, communicate with others, and effectively participate in society (Susilo, 2013; Skorupinska & Torrentsellens, 2017). The results of previous studies have shown that the integration of information technology in learning promotes skills related to critical thinking, decision-making, innovation and creativity, collaboration and communication, and problem-solving abilities (Rahmawati, 2018; Effendy et al., 2020). The role of lecturers as educators, in this case, is to realize that these skills will have an impact on future generations. It is similar to Murati's (2015) result that lecturers should be digitally competent in internet research, hypertext, information content evaluation, and knowledge preparation (Apriani & Hidayah, 2019).

The lecturers' ICT capabilities, digital competence, digital literacy, and technical pedagogy must today be developed digitally as part of the lecturers' development in digital innovation and educational skills (Nguyen et al., 2020), developing expertise and experience as well as a pedagogical practice necessary for quality education, so as to increase pedagogical efficiency (Tondeur et al., 2017). Despite a lot of research skills in digital education, it is found a gap between the basic digital skills of common citizens and the abilities of digital lecturers (Pettersson, 2018). The lecturers' digital skills consist of a variety of knowledge and skills related to digital technology and its classroom practice (Mujahidah et al., 2020). In addition to the lecturers' digital competence, digital skills still use various related concepts as a symbol, such as the lecturer's IT proficient capabilities, digital pedagogical skills, and professional digital skills are frequently used synonymously. However, all definitions showed that lecturers need to be capable of using digital technology correctly and integrating it into their teaching and learning practices (Spante, 2018).

This study had an objective to examine the correlation between lecturers' digital competencies and online teaching issues so that they can identify the role and innovation of

lecturers in changing paradigms of education since it is the serious urgency and challenges of online learning, namely online teaching infrastructure, the skills and experience of lecturers, the information gaps, and the online educational environment at home (Zhang et al., 2020). The benefit to be gained from this research is to encourage the performance and motivation of lecturers and stakeholders of institutional identity so that it becomes a key concept for the success of the university as an institution that always supports teaching and learning competencies. Therefore, the lecturers must achieve a high level of digital literacy for their excellence in the teaching profession (Gisbert, 2015). Therefore, it is necessary to know exactly what are key gaps in information processing, communication and collaboration, digital safety and content creation, and problem-solving skills to lead to the development of lecturers' digital competencies according to the 21st century.

The center of expertise in the 21st-century education sector consists of creativity, critical thinking, communication, and collaboration (4Cs). What is verified in Figure 1 can offer lecturers to be able to have those capabilities. They must also have stable fundamental abilities and soft abilities in the 4Cs. The function is expected to accumulate the character's personality, carry passion, and inspire the students that technology and the era cannot replace. The lecturers who have digital and research capacity, competencies within the age of globalization, academic competence, and interoperability in learning are taken into consideration in overall performance competence (Zezulka et al., 2016; Lee, 2013).

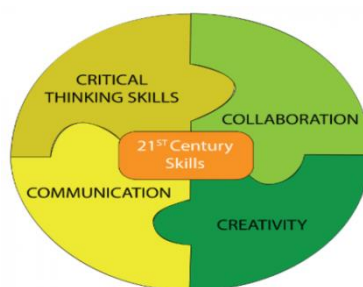


Figure 1. Digital Competences in 21st Century Skills

However, this also does not escape the challenges for lecturers when implementing 21st century skills which involve 4 skills. The first step is critical thinking and problem-fixing skills. It is the capacity to apprehend a problem, get as much information as possible, and come up with multiple perspectives to addressing it. The purpose of this first skill is to integrate gaining knowledge of and export those capabilities to students. The second is communication and collaboration capabilities so that lecturers can observe collaboration within the teaching process. Third, it is the capacity to assume creatively and be innovative. Lecturers can apply new ideas to encourage students to think creatively and innovatively (for example, work on assignments using technology and information). The fourth is to master technology and information so that lecturers are capable of collecting many references within the use of technology and information to help their teaching and gaining knowledge of the process (Drath & Horch, 2014).

Research problems that will be achieved to prove the pedagogical competence of lecturers and the effectiveness of online learning in the form of content, communication, and evaluation of learning are described as follows:

1. What is the role and innovation of English lecturers in the face of the paradigm shift in online learning?
2. What are the conditions of digital learning related to English lecturers' competencies?

METHOD

This qualitative study used observation, questionnaires, semi-structured interviewed, and document collection to develop a descriptive approach (Yusuf, 2014). The participants were

23 English lecturers at 4 universities located in North Sumatra, Indonesia. Data were collected by compiling several questions with observation sheets to obtain more detailed information using the google form, such as the interactions between the lecturer and the students, online learning activity, changes in the lecturer's role regarding the use of technology as well as the feedback and the assessment in online learning within Zoom meeting, Google Classroom, WhatsApp group, and online lesson plan software.

The analysis model of Muliani et al. (2021) was used with the following steps: (a) Qualitative data based on dominant factors that indicate the paradigm shift of lecturers' role in online learning; (b) Tables and charts that illustrate the lecturer's 21-st century skill in English lesson phase that illustrate the digital skill for lecturers in English lesson phase; (c) Making new conclusions or verifying existing data by developing a description of an object that could not previously be defined and that could be found based on the previous study of online learning in the COVID-19 era. According to the model above, this study looked at two key factors: (1) The ability of lecturers to use technology, as well as (2) how relevant technology was to the tools that the lecturers used through their responses. It was intended that these steps would clarify the relationship between the variables studied, as well as form hypotheses, theories, or causal relationships that could explain the results.

Triangulation technique was used as the data validity through the following process: (1) Peer discussion: Instead of relying on individual perspectives, the lecturers conveyed similar data based on their interpretation based on their perspectives, (2) Collected data according to keywords used in the aforementioned previous researches: paradigm shifts, education technology in the COVID-19 era, and lecturers' knowledge of online learning to define the concept of online teaching and learning in terms of the viewpoints of the lecturers, and (3) Built general assumption to avoid any bias: Data was compiled based on general assumptions by using a questionnaire in Google form to obtain data on each of the elements in a statement. To be fair, other researchers could use this questionnaire to obtain the research objectives (Lemon & Hayes, 2020).

FINDINGS AND DISCUSSION

FINDINGS

The observation in this research proved the three dominant reasons for the paradigm shift of the lecturers' competence during online learning in COVID-19:

Pedagogical Reasons for Lecturers

Based on the observation, the most common reason for the lecturers' competence was learning planning. Before learning planning was arranged, the lecturers usually analyzed the students' characteristics, teaching materials, and the content of the lesson that would be shared. The lecturers ensured the students had creative and critical thinking by applying exercises that required high-level cognitive processes by doing research from journals, examining videos on youtube, and making project-based learning by using social media such as Instagram, Pinterest, or free online course sites. The lecturers generally selected appropriate technology based on their lesson and shared the innovations based on new technology that they never knew before, for example, Edmodo, Google form, School planner, Cerebrum, Google for Education, or Zenius. The three indicators were classified based on online learning and the lecturers' pedagogical reasons: (1) Instruction: The process to explain an instruction was not the same as face-to-face communication in classroom, so instruction based on online learning must be accurate and clear so that the students could understand the content, (2) Content and Tasks: If four skills in English was applied in online learning, the content of online learning should be related with real-life situations and easy to be integrated by providing a hands-on learning opportunity to the students; and this was the situation that the lecturers usually had a weakness to overcome the problem, (3) Students' motivation: The lecturers generally used online questionnaire to indicate the personal information of the students, such as level of competence, prior knowledge, learning style, critical thinking, and cooperation since online learning could

demotivate the students and they usually dependent to the lecturers' notes about them. The lecturers could enhance their personal skills by having direct interactions and dialogic communication. Lecturer 1 responded: *"We need the creativity to design new lesson plans needed based on digital use."* Lecturer 2 said: *"I could be responsible and independent with my duties since online learning trained me to assess the students' homework which provided timely feedback and encouraged the involvement of the students in the chat discussion."* Lecturer 3 criticized: *"I personally connected through the use of weekly course progress, online tutorials, and course materials to monitor the students' learning progress and support the task guidance when the students were confused."*

The Competency of Lecturers' to Conduct Online Learning

The second reason for online learning in the COVID-19 era was related to the role of the lecturer as a consultant and moderator since online learning could not be organized like a physical classroom. Thus, instruction and feedback must be given in a new approach since some of the students only viewed the lesson without preparation for the optimization of digital content. The lecturer could combine technology, pedagogy, and content as an opportunity to transform knowledge to direct the students' attention to effective online learning use. Lecturer 4 examined: *"The sense of the process of autonomy and flexibility through the choice of the lesson plan was crucial since online learning was more than just providing the content and downloading materials for me."* Lecturer 5 said: *"The learning experience of cooperation and interaction was limited in online learning so I always educated myself on this area."* Lecturer 6 said: *"Reading many references while researching to complete the task was one of the challenges in online learning."* Lecturer 7 said: *"Working with a professional mentor when taking the online course was valuable so the students did not get bored with just one activity."*

Learning Evaluation through Online Learning

The third reason for online learning in the COVID-19 era was the digitalization of learning through the students' tasks since it could not simply replace a traditional classroom. Many virtual classrooms were scheduled to know the interesting and the exciting learning tasks and evaluations so the students did not seem to think of it as a classroom. The examples of the activity regarding learning evaluation were (1) using group email, (2) pairing and grouping the students into project-based learning through educational software, (3) posting their tasks through the website and social media, and (4) redesigning online community to promote English practice. Lecturer 8 said: *"Limitation of time was not needed when I chose Google Meeting for online teaching."* Lecturer 9 said: *"Technology brought joy, challenge, or obstacle or the answer of learning need to the students' academic proficiency."* Lecturer 10 said: *"Learning evaluations that I used were creating peer-reviewed journals or blogs, emphasizing project-based learning, and using pre-existing online videos from online courses."* Lecturer 11 said: *"Online mind-mapping, animation, online quiz, and Prezi were introduced in my classroom to know the interactive learning resources."* Lecturer 12 said: *"I could monitor the students' progress based on weekly reports provided by learning management systems such as self-assessment quizzes."* Lecturer 13 said: *"Some of the students loved online courses which were provided the certificates to show their activities in the learning process such as engaging videos or optional lessons."*

The Role and Innovation of English Lecturers in Online Learning

The results of this research were analyzed based on the first problem which was stated as: What was the role and innovation of English lecturers in the face of the paradigm shift in online learning?

Table 1. The Process of Online Teaching and Learning

Lesson Phase	English Lecturers' Actions in English Lesson Phase	Effective	Non-effective
Activation of prior learning	Helped the students remember what they discovered or practiced in preceding lessons.	73%	27%
	Invited the students to illustrate new studying skills, techniques, and content material expertise.	76%	24%
	Reflected and reported on prior learning.	88%	12%
	Exhibited new skills, techniques, and knowledge through practice.	77%	23%
Preview/warm-up	Previewed lesson, connected new material to material just reviewed or practiced.	92%	8%
	Checked the students' knowledge of content material and literacy ideas at hand.	80%	20%
	Guided the students in anticipating lesson content by stimulating prediction about topics, texts, and tasks.	70%	30%
	Responded to lesson preview.	73%	27%
	Responded to the student's prompts.	86%	14%
	Directed focal attention to lesson aims and tasks.	79%	21%
Lesson core	Gave instruction, procedures, and guided participation.	95%	5%
	Communicated lesson objectives.	93%	7%
	Presented reading strategy, task, activity, and lecture.	68%	32%
	Modeled strategy, task, or activity; instructed the students in practicing new skills and strategies.	74%	26%
	Tasks or activities were assigned to the students individually or in groups.	73%	27%
	Responded to the student's presentation by asking questions or taking notes.	82%	18%
	Observed modeling or asked questions.	77%	23%
	Undertook tasks or activities individually or in groups.	75%	25%
	Elicited the student's assistance to complete the task, as needed.	68%	32%
	Provided opportunities for the students to practice target skills and strategies independently.	86%	14%
	Completed tasks independently.	93%	7%
	Encouraged the student involvement, participation, and interaction.	95%	5%
	Checked the students' ability to display skills and strategies and their understanding of text content.	76%	24%
	The transition from one phase to the next of the lesson was introduced.	73%	27%
Informally assessed the student participation, performance, and learning.	94%	6%	

Closure/gate keeping	Prompted the students to reflect on what they had learned and practiced.	96%	4%
	Linked new skills, strategies, and knowledge to prior learning.	78%	22%
	Discussed or described what they had learned or practiced.	73%	27%
	Discussed the connection of recent learning to earlier learning.	74%	26%
Continuing lessons, extending knowledge, and preparing for future learning	Presented further tasks or activities to develop new skills, strategies, and content knowledge.	86%	14%
	Extension tasks were introduced and learning objectives were reinforced.	74%	26%

Table 2. English Lecturer's Role and Innovation in Online Learning

English Lecturer's Role and Innovation in Online Learning	Effective	Non-effective
Arranging some interesting tasks in the e-learning program.	75%	25%
Using different technologies like videos and podcasts.	80%	20%
Participating in discussion forums to develop a deeper understanding of concepts with others.	87%	13%
Facilitating social communication between students by using discussion forums.	77%	23%
Developing a lesson review based on online resources.	82%	18%
Developing multimedia teaching.	90%	10%
Developing a creative medium for teaching.	100%	0%
Developing interactive online courses.	72%	28%
Conducting quantitative and qualitative research and evaluating current models of the online teaching and learning process.	56%	44%
Arranging classes flexibly study sessions by following the student's schedules according to the plan.	88%	12%
Organizing online exams for distance learning.	92%	8%
Creating digital book resources for the benefit of all students.	45%	55%
Developing awareness of the impact of technology on the environment.	40%	60%
Building university projects related to the development of digital development.	55%	45%
Sharing information through various educational social media networks.	87%	13%
Developing blogs and online learning courses as a means of developing online learning.	76%	24%
Critically evaluating web content.	65%	35%
Selecting, organizing, and classifying information from the internet.	90%	10%
Developing an electronic portfolio by reviewing, searching, and selecting data and information based on some educational content.	80%	20%
Interpreting the learner dashboard to monitor each learner's performance.	90%	10%

Tabel 3. The Lecturer Responses to Online Learning in University based on 4Cs

Statements	Percentage (%)				
	1	2	3	4	5
1. Creativity					
A good online lecturer integrated students' discussion about the content.	54%	20%	13%	7%	6%
I used online learning to introduce my students to new technologies.	45%	25%	19%	7%	4%
In online learning, I provided my students with as much information as possible according to the world's needs.	43%	22%	18%	11%	6%
Before I began my online education, I spent a great deal of time making sure I had a comprehensive understanding of my subject matter.	64%	20%	11%	3%	2%
I selected the appropriate digital technology to match the content and the learning outcome.	63%	16%	11%	4%	3%
I adjusted an appropriate pedagogical approach to match the technology.	54%	11%	13%	3%	2%
2. Critical Thinking					
My students had been taught how to use logic and rational thinking through online learning.	68%	12%	10%	8%	5%
Lecturers were responsible for providing an environment where students could construct knowledge rather than receive the content.	74%	13%	6%	4%	3%
I used online learning to prepare the students' roles after graduating from an institution.	73%	12%	7%	6%	2%
I ensured that my students were well-trained in the unit competencies by the end of the course.	72%	13%	10%	2%	3%
3. Communication					
I spent more time in online learning directing discussions than providing information.	64%	17%	14%	3%	2%
During my online learning experience, I spent most of my time trying to present course material in a way that would draw students' attention.	70%	9%	11%	4%	6%
I modeled good digital citizenship when communicating with students by using social media.	68%	10%	13%	7%	2%
I was able to formulate good questions when interacting with students.	72%	7%	10%	8%	3%
The videos or other methods I used to impersonate my students were introductory videos or self-disclosure methods.	65%	12%	11%	8%	4%
I had a social responsibility for the use of resources.	66%	10%	9%	11%	4%
I considered privacy issues with information obtained from students.	71%	8%	12%	5%	4%

4. Collaboration

Good online lecturers had a real interest in students' well-being.	73%	12%	7%	3%	3%
I would host a discussion forum where students explored concepts and developed in-depth knowledge together.	69%	10%	12%	3%	6%
I encouraged learners to think outside of the box.	68%	10%	13%	6%	3%
I had proposed additional learning activities for students who needed them.	72%	7%	10%	7%	4%
I attracted students by using interactive strategies such as serious games and simulations.	72%	7%	11%	7%	3%

The Conditions of Digital Learning to English Lecturers' Competencies

The results of this research were analyzed according to a Likert Scale table consisting of 1 (Strongly Agree), 2 (Agree), 3 (Hesitating), 4 (Disagree), and 5 (Strongly Disagree) and it was based on the second problem which was stated as: What were the conditions of digital learning related to English lecturers' competencies?

Tabel 4 Percentage of Online Learning Conditions Related to Lecturers' Competence

Online Learning Conditions Related to English Lecturer Competence	1 %	2 %	3 %	4 %	5 %
Online courses, including e-books, e-journals, and other digital educational materials, were what I used to research for my growth and professional development.	38%	37%	18%	4%	4%
To further develop myself professionally, I collaborated with and took part in online communities, webinars, and conferences.	39%	26%	19%	11%	5%
My role involved managing and conducting conference activities using digital tools (for instance, digital notes, attendance registers, class and event planning, and collaboration online with teachers or lecturers).	50%	21%	17%	9%	3%
Utilizing digital tools, I developed and managed programs and compared the progress of students across classes (for example, software to record various instructional materials).	21%	26%	27%	19%	7%
I managed digital tools to develop and manage university infrastructure and resources (for example, technology equipment upgrades and maintenance).	34%	27%	22%	12%	5%
In my work on university quality assurance, I developed and managed digital tools, examples include digital tools for recording problems, complaints, recommendations, and tracking the resolutions of these problems; comparative analysis of the student's performance during a class exam.	35%	26%	23%	11%	5%
Through the use of digital technology, I was able to generate research and educational innovations	44%	24%	18%	9%	5%

(for example, statistical analysis of questionnaires to identify important parameters impacting learning or developing educational software for simulations).					
Through digital technology, I ensured quality assurance in education (for example, statistical analyses of students' academic and professional outcomes).	11%	17%	27%	27%	18%
By utilizing digital tools, I identified and analyzed the needs, characteristics, and resources of my students, as well as the resources, tools, and infrastructure available for my lessons.	27%	17%	27%	18%	11%
Through search engines, digital repositories, and databases, I located, evaluated, and classified existing educational resources using multiple indicators, metadata filters, and recommendations.	41%	22%	20%	11%	6%
I developed new educational resources by editing, writing, and managing text, presentations, audio, images, videos, games, blogs, wikis, quizzes, and tests using digital tools.	45%	25%	18%	8%	4%
Using digital calendars, time planners, and project management software, I planned, organized, and scheduled the most appropriate instructional resources.	40%	24%	18%	11%	7%
For managing my courses, classes, activities, students, educational resources, and assignments, I used software, such as software for projects, management of classrooms and universities, learning management systems, plagiarism detection, and security software.	27%	26%	21%	19%	7%
Among the tools I used to teach students were digital presentations, video conferencing, webinars, video platforms, and serious games.	65%	17%	12%	4%	2%
Digital communication and collaboration helped me to communicate, collaborate, and interact with the students by using social networks, online games, or web conferencing.	64%	18%	13%	3%	2%
I used digital assessment technology (for example, digital quizzes, tests, exercises, assignments, questions, web searches) to regularly assess students' progress.	64%	17%	11%	4%	3%
Assessing students' progress through digital technology was a regular part of my teaching by using screen sharing or dashboards to monitor the students' progress.	16%	22%	23%	25%	14%
Learning management systems that I used such as annotations, chatbots, and autocorrect could give my students more feedback and guidance throughout their studies.	13%	21%	30%	24%	12%

I reflected on the students' performance and behavior through the use of digital technology such as blogs, videos, sounds, or concept mind mapping.	32%	26%	23%	14%	5%
I adapted my teaching based on information in technology by monitoring, evaluating, and reflecting on the tools that I used in the classroom.	30%	24%	21%	13%	12%
Digital assessment tools could help me to evaluate the students or educational resources that I used for lessons, exams, and performance evaluation.	38%	28%	19%	11%	4%
I reviewed and evaluated my preparation for teaching through the use of digital technology by following monitoring, testing, and evaluation software.	30%	24%	24%	16%	6%

The results of the research on the first problem and the second problem can be described according to the chart below.

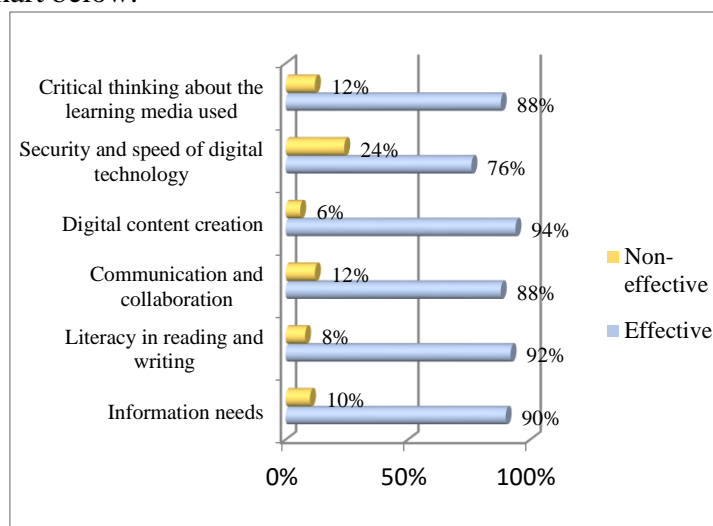


Chart 1. Digital Competency Areas for English Lecturers

DISCUSSION

English lecturers' efforts to conquer the limitations they confronted required continuous development, both independently and individually so that English lecturers' beliefs were regularly constructed and progressed in the implementation of online learning, especially in the usage of ICT. It could be seen based on table 1, table 2, table 3, and table 4 above (Stambough et al., 2020; Kaufman, 2014). The first previous research by Hogan (2016) proved that the abilities of the lecturers to use digital technology in the preparation of learning tools, the implementation of learning, the assessment method, information gathering, and feedback were the success of technical mastery in online learning. The second research by Florian (2017) proved that the flexible and effective resources in online learning allowed the lecturers to be self-directed, although that incapability to train and research practical methods based on digital use had been highlighted. The third research by Xie et al. (2017) proved that providing immediate support and feedback was the most effective method of the lecturers' competence to influence the online course delivery because the students generally adjusted the speed of the video in Zoom meetings so the lecturers should never use the same lesson plan as in a regular classroom. The fourth research by Zhang et al (2020) proved that the lecturers had many tasks

to be scheduled as autonomous learners since the most issue in online learning was based on content-related problems than technological problem.

The results of this study proved that the usage of technology in education 4.0 was different from the industry 4.0 era. Education 4.0 was in the form of contextualized education with the purpose to improve educational quality as a response to the student's needs and learning methods. The digital competencies of lecturers must adapt to the following factors, such as knowledge, students' sensitivity to tasks, contextual teaching and learning, and the stimulation of ideas as feedback for students to promote innovative ideas in online learning. Through this research, the lecturers' profile had shown that the value of technology use in the classroom could integrate university curriculum and other educational community members, such as industry, policy-makers, and social entrepreneurs to develop self-regulation as future professionals in educational sciences. As teaching needs in Indonesian universities continue to grow in the COVID-19 era, this survey responses could reflect how the lecturers transform the learning through the concept of the creativity of pedagogy and digital use in the classroom.

The experience of using technology and information in the implementation of distance education during the COVID-19 pandemic not only resulted in a positive effect but also allowed English lecturers to pursue learning with greater vigor and innovation (Gok & Syalay, 2014; Bhat et al., 2020). As a result, the government needed to enhance the skills of English lecturers in using ICT to keep online learning running smoothly and successfully; this was necessary to integrate technology into pedagogical practice (Habib & Johannesen, 2020; Potter et al., 2012).

CONCLUSION

The findings and the discussion of this study indicated that online learning could increase the competence of lecturers in literacy and technology use, which required personal responsibility, independence, and perseverance. Based on the finding and discussion, the lecturers and the students must download and read materials, answer questions/exercises, and submit their assignments individually. In this case, digital learning capability would give a higher overall performance to English lecturers than traditional learning due to broader knowledge and technology literacy. Therefore, technology became a key factor in developing the various skills inherent in 21st-century lecturers, as a means of accessing global knowledge, especially in English faculty. Curricula with virtual instructional content could serve the broader educational goals of the classroom inside a training system that would not leave behind students who were not familiar with technologies. Online learning in the COVID-19 allowed the students to have many choices about when and how their assignments were done so the lecturers always personalized technology by collaborating with talented professionals worldwide and provided the flexibility to access the online materials based on the students' preferences.

Therefore, it was necessary to organize digital skill training within the framework of education policy as a form of ensuring the sustainability of the results of this scientific research. In general, innovative technologies were not created to replace people to improve productivity; instead, there must be close cooperation between people and technology. Future studies should discuss the opportunities for technology adaptability, lifelong learning, and a future skill set of competencies to meet the challenge of rapidly changing occupational skill requirements for lecturers in industry 4.0. Thus, changes made in teaching strategies and technology applied in the educational process will eventually require lecturers to develop a new set of skills.

REFERENCES

- Al-Hakim, M. F. (2021). Peran guru dan orang tua: Tantangan dan solusi dalam pembelajaran daring pada masa pandemi COVID-19. *Riwayat: Educational Journal of History and Humanities*, 1(1), 23–32. <http://jurnal.unsyiah.ac.id/riwayat/>
- Apriani, E., & Hidayah, J. (2019). The ICT Used by the English Lecturers for Non English Study Program Students at STAIN Curup. *Vision: Journal for Language and Foreign Language Learning*, 8(1), 26-37. doi: 10.21580/vjv8i13280
- Barclay, V. C., Smieszek, T., He, J., Cao, G., & Rainey, J. J. (2014). Positive network assortativity of influenza vaccination at a high school: Implications for outbreak risk and herd immunity. *PloS one*, 9(2), e87042. doi: 10.1371/journal.pone.0087042
- Basar, T. & Sahin, L. (2022). Technology integration in teaching English as a foreign language: A content analysis study. *Journal of Educational Technology and Online Learning*, 5(1), 204-222. doi: 10.31681/jetol.972577
- Bhat, R., Singh, V. K., Naik, N., Kamath, C. R., Mulimani, P., & Kulkarni, N. (2020). Covid-19 2019 outbreak: The disappointment in Indian teachers. *Asian Journal of Psychiatry*, 50, 102047. doi: 10.1016/j.ajp.2020.102047
- Brown, K., Toombs, M., Nasir, B., Kisely, S., Ranmuthugala, G., Brennan-Olsen, S. L., Nicholson, G. C., Gill, N. S., Hayman, N. S., Kondalsamy-Chennakesavan, S., & Hides, L. (2020). How can mobile applications support suicide prevention gatekeepers in australian indigenous communities? *Social Science & Medicine*, 258, 113015. doi:10.1016/j.socscimed.2020.113015
- Drath, R., & Horch, A. (2014). Industrie 4.0: Hit or Hype?. *IEEE Industrial Electronics Magazine*, 8(2), 56-58. <https://doi.org/10.1109/MIE.2014.2312079>
- Effendy, A. A., Sudarso, A. P., Nurhadi, A., Arifianto, C. F., & Kartono. (2020). Peningkatan profesionalisme guru dan pengembangan sdm dalam menghadapi era revolusi industri 4.0 pada guru smk mulia buana parung panjang bogor. *Abdi Laksana: Jurnal Pengabdian Kepada Masyarakat*, 1(2), 198–204.
- Florian, L. (2017). The heart of inclusive education is collaboration. *Pedagogika*, 126(2), 248–253. doi: 10.15823/p.2017.32
- Fong, M. W., Gao, H., Wong, J. Y., Xiao, J., Shiu, E. Y. C., Ryu, S., & Cowling, B. J. (2020). Nonpharmaceutical measures for pandemic influenza in nonhealthcare settings: Social distancing measures. *Emerging Infectious Diseases*, 26(5), 976. doi: 10.3201/eid2605.190995
- Gisbert, M., & Lazaro, J. L. (2015). Professional development in teacher digital competence and improving school quality from the teachers' perspective: A case study. *Journal of New Approaches in Educational Research*, 4(2), 115–122.
- Gok, T., & Sylay, I. (2014). The effects of problem solving strategies on students' achievement, attitude, and motivation. *Latin-American Journal of Physics Education*, 4(1): 7-21.
- Guernsey, L., Ishmael, K., & Prescott, S. (2020). Online learning in the wake of COVID-19 tips and resources for PreK-12 with equity in mind. Retrieved from: <https://www.newamerica.org/educationpolicy/edcentral/onlinelearning-wake-covid-19/>
- Habib, L., & Johannesen, M. (2020). The role of academic management in implementing technology-enhanced learning in higher education. *Technology, Pedagogy and Education*, 29(2), 129–146. doi: 10.1080/1475939X.2020.1722735
- Hogan, C. (2016). A typology of transformation: Reviewing the transformative learning literature. *Studies in the Education of Adults*, 48(1), 65–82. doi: 10.1080/02660830.2016.1155849
- Jackson, J., Iacovides, J., Duncan, M., Alders, M., Maben, J., & Anderson, J. (2020). Operationalizing resilient healthcare concepts through a serious video game for

- clinicians. *Applied Ergonomics*, 87(4), 103112. doi: 10.1016/j.apergo.2020.103112
- Kaufman, K. (2014). Information communication technology: Challenges & some prospects from pre-service education to the classroom. *Mid-Atlantic Education Review*, 2(1), 1–11.
- Lee, J., Lapira, E., Bagheri, B., & Kao, H. (2013). Recent advances and trends in predictive manufacturing systems in big data environment. *Manufacturing Letters*, 1(1), 38–41. <https://doi.org/10.1016/j.mfglet.2013.09.005>
- Lemon, L. L., & Hayes, J. (2020). Enhancing trustworthiness of qualitative findings: Using Leximancer for qualitative data analysis triangulation. *The Qualitative Report*, 25(3), 604–614.
- Mujahidah, Afiah, N., & Syaiful. (2020). Perceptions of English Education Program Students Towards The Professionalism of English Education Lecturers in Online Learning at IAIN Parepare. *Asian Social Science and Humanities Research Journal (ASHREJ)*, 2(2), 70–76. doi: 10.37698/ashrej.v2i2.37
- Mukhopadhyay, S., Booth, A. L., Calkins, S. M., Doxtader, E. E., Fine, S.W., Gardner, J. M., & Jiang, X. (2020). Leveraging technology for remote learning in the era of COVID-19 and social distancing: Tips and resources for pathology educators and trainees. *Archives of Pathology & Laboratory Medicine*, 144(9), 1027–1036. doi: 10.5858/arpa.2020-0201-ED.
- Muliani, M., Novita, N., Marhami, M., & Sakdiah, H. (2021). Pengembangan kompetensi literasi digital pada guru untuk optimalisasi pembelajaran jarak jauh. *Matappa: Jurnal Pengabdian Kepada Masyarakat*, 4(1), 51–58.
- Murati, R. (2015). The role of the teacher in the educational process. *The Online Journal of New Horizon in Education*, 5(2), 75–78.
- Nguyen, N. T., Thai, T. V., Pham, H. T., & Nguyen. (2020). Cdio approach in developing teacher training program to meet requirement of the industrial revolution 4.0 in Vietnam, *International Journal of Emerging Technologies in Learning*, 15(18), 108–123. doi: 10.3991/ijet.v15i18.15517
- Pettersson, F. (2018). On the issues of digital skills in educational contexts: A review of literature, *Education and Information Technologies*, 23(3), 1005–1021. doi: 10.1007/s10639-017-9649-3
- Potter, M. A., Brown, S. T., Cooley, P. C., Sweeney, P. M., Hershey, T. B., Gleason, S. M., Lee, B. Y., Keane, C. R., Grefenstette, J., & Burke, D. S. (2012). School closure as an influenzamitigation strategy: How variations in legal authority and plan criteria can alter the impact. *BMC Public Health*, 12(1): 1–10. doi: 10.1186/1471-2458-12-977
- Prem, K., Liu, Y., Russell, T. W., Kucharski, A. J., Eggo, R. M., Davies, N., Jit, M., Klepac, P., Flasche, S., Clifford, S., Pearson, C. A. B., Munday, J. D., Abbott, S., Gibbs, H., Rosello, A., Quilty, B. J., Jombart, T., Sun, F., Diamond, C., & Hellewell, J. (2020). The effect of control strategies to reduce social mixing on outcomes of the COVID-19 epidemic in Wuhan, China: a modelling study. *The Lancet Public Health*, 5(5), e261–e270. doi: 10.1016/S2468-2667(20)30073-6
- Putria, H., Maula, L. H., & Uswatun, D. A. (2020). Analisis proses pembelajaran dalam jaringan masa pandemi covid- 19 pada guru sekolah dasar. *Jurnal Basicedu*, 4(4), 861–870.
- Rahmawati, N. I. (2018). Pemanfaatan ict dalam meningkatkan kemampuan literasi matematika. *Prisma*, 1, 381. <https://journal.unnes.ac.id/sju/index.php/prisma/article/view/19606/9529>

- Regehr, C., & Goel, V. (2020). Managing COVID-19 in a large urban research-intensive University. *Journal of Loss and Trauma*, 25(6), 523–539. doi: 10.1080/15325024.2020.1771846
- Skorupinska, A., & Torrent-sellens, J. (2017). Ict, innovation and productivity: evidence based on Eastern European manufacturing companies. *Journal of the Knowledge Economy*, 8(2), 768–788. doi: 10.1007/s13132-016-0441-1
- Spante, M., Hashemi, S., Lundin, M., & Algers. (2018). Digital skills and digital literacy in higher education research: Systematic review of concept use. *Cogent Education*, 5(1), 1-21. doi: 10.1080/2331186x.2018.1519143
- Stambough, J. B., Curtin, B. M., Gililland, J. M., Guild, G. N., Kain, M. S., Karas, V., Keeney, J. A., Plancher, K. D., & Moskal, J. T. (2020). The past, present, and future of orthopedic education: Lessons learned from the COVID-19 pandemic. *Journal of Arthroplasty*, 35, S60–S64. doi: 10.1016/j.arth.2020.04.032
- Susilo, A. F. (2013). Peningkatan efektivitas pada proses pembelajaran. *MATHEdunesa*, 2(1), 1-9.
- Tarigan, K. E., Elahi, E., & Stevani, M. (2022). Education Responses in Teaching during Covid-19: The Ongoing Result in Online Learning Implementations. *Journal of Learning and Development Studies*, 2(1), 09-30. <https://doi.org/10.32996/jlds.2022.2.1.2>
- Tondeur, J., Aesaert, K., Pynoo, van Braak, Fraeyman, & Erstad. (2017). Developing a validated questionnaire to measure preservice teachers' ICT competencies: Meeting the demands of the 21st century, *British Journal of Educational Technology*, 48(2), 462–472. doi: 10.1111/bjet.12380
- Tuli, S., Tuli, S., Tuli, R., & Gill, S. S. (2020). Predicting the growth and trend of COVID-19 pandemic using machine learning and cloud computing. *Internet of Things*, 11, 100222. doi: 10.1016/j.iot.2020.100222
- Xie, J., Basham, J. D., Marino, M. T., & Rice, M. F. (2017). Reviewing research on mobile learning in K–12 educational settings. *Journal of Special Education Technology*, 33(1), 27–39. doi: 10.1177/0162643417732292
- Yuhariati, J., Budi, A., Ma'awiyah Aisyah, Z., Syabuddin, H. M., Hamidansyah, R. M., Hambali, I., & Samsul, B. (2020). E-Learning as connector among education institution in the 4th industrial revolution. *Journal of Physics: Conference Series*, 1471, 012024. doi: 10.1088/1742-6596/1471/1/012024
- Yusuf, M. (2014). *Metode Penelitian: Kuantitatif, Kualitatif, dan Penelitian Gabungan*. Jakarta: Kencana.
- Zezulka, F., Marcon, P., Vesely, I., & Sajdl, O. (2016). Industry 4.0: An Introduction in the phenomenon. *IFAC-Papers OnLine*, 49(25), 8-12. doi: 10.1016/j.ifacol.2016.12.002
- Zhang, W., Wang, Y., Yang, L., & Wang, C. (2020). Suspending classes without stopping learning: China's education emergency management policy in the COVID-19 outbreak. *Journal of Risk and Financial Management*, 13(3), 55. doi: 10.3390/jrfm13030055